receiving the signal reflected by said sample, which
received signal is distorted and contains a first order and
higher order component signals at first and higher frequencies
respectively:

　　forming an image from one of said higher order component
signals of the received distorted signal, [wherein the forming
step includes] including the step of removing from the received
distorted signal the first order component thereof; and

　　displaying said formed image.

　　8. (Once Amended) A method of imaging a sample, [according
to Claim 1,] comprising the steps of:

　　generating an ultrasonic signal:

　　directing the ultrasonic signal into a sample, wherein the
sample reflects the signal;

　　receiving the signal reflected by said sample, which
received signal is distorted and contains a first order and
higher order component signals at first and higher frequencies
respectively;

　　forming an image from one of said higher order component
signals of the received distorted signal; and

　　displaying said formed image;

　　wherein said higher order component signals include[s] a
second order component, and the forming step includes the step
of forming the image from said second order component.

　　10. (Once Amended) A method of imaging a sample,
[according to Claim 1] comprising the steps of:

　　generating an ultrasonic signal:

　　directing the ultrasonic signal into a sample, wherein the
sample reflects the signal;

　　receiving the signal reflected by said sample, which
received signal is distorted and contains a first order and

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higher order component signals at first and higher frequencies respectively;

forming an image from one of said higher order component signals of the received distorted signal; and

displaying said formed image;

wherein the directing step includes the step of maintaining the sample substantially free of any contrast agent not naturally present in the sample.

13. (Once Amended) A system for imaging a sample, [according to Claim 12,] comprising:

means for generating an ultrasonic signal;

means for directing the ultrasonic signal into a sample, wherein the sample reflects the signal;

means for receiving the signal reflected by said sample, which received signal is distorted and contains a first order and higher order component signals at first and higher frequencies respectively;

means for forming an image from one of said higher order component signals of the received distorted signal, [wherein the] said means for forming the image [includes] including means for removing from the received distorted signal the first order component thereof; and

means for displaying said formed image.

19. (Once Amended) A system for imaging a sample, [according to Claim 12,] comprising:

means for generating an ultrasonic signal;

means for directing the ultrasonic signal into a sample, wherein the sample reflects the signal;

means for receiving the signal reflected by said sample, which received signal is distorted and contains a first order and higher order component signals at first and higher

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frequencies respectively;

    means for forming an image from one of said higher order component signals of the received distorted signal; wherein said higher order component signals include a second order component, and the means for forming the image includes means for forming the image from said second order component; and

    means for displaying said formed image.

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21. (Once Amended) A system for imaging a sample, [according to Claim 12,] comprising:

    means for generating an ultrasonic signal;

    means for directing the ultrasonic signal into a sample, wherein the sample reflects the signal;

    means for receiving the signal reflected by said sample, which received signal is distorted and contains a first order and higher order component signals at first and higher frequencies respectively;

    means for forming an image from one of said higher order component signals of the received distorted signal; and

    means for displaying said formed image;

wherein the sample is substantially free of any contrast agent not naturally present in the sample.

--23. A method of imaging a sample, comprising the steps of:

    generating a series of ultrasonic pulse signals;

    directing the ultrasonic pulse signals into a sample, wherein the sample reflects the pulse signals;

    receiving the pulse signals reflected by said sample, which received pulse signals are distorted and contain a first order and higher order component signals at first and higher frequencies respectively

    forming an image from one of said higher order component signals of the received distorted pulse signals; and

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displaying said formed image.

24. A method of imaging a biological sample, comprising the steps of:

generating an ultrasonic signal;

directing the ultrasonic signal into the biological sample, wherein the sample reflects the signal;

receiving the signal reflected by said sample, which received signal is distorted and contains a first order and higher order component signals at first and higher frequencies respectively;

forming an image from one of said higher order component signals of the received distorted signal; and

displaying said formed image.

25. A system for imaging a sample, comprising:

means for generating a series of ultrasonic pulse signals;

means for directing the ultrasonic pulse signals into a sample, wherein the sample reflects the pulse signals;

means for receiving the pulse signals reflected by said sample, which received pulse signals are distorted and contain a first order and higher order component signals at first and higher frequencies respectively;

means for forming an image from one of said higher order component signals of the received distorted pulse signals; and

means for displaying said formed image.

26. A system for imaging a sample, comprising:

means for generating an ultrasonic signal;

means for directing the ultrasonic signal into a sample, wherein the sample reflects the signal;

means for receiving the signal reflected by said sample, which received signal is distorted and contains a first order and higher order component signals at first and higher

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frequencies respectively;

means for forming an image from one of said higher order
component signals of the received distorted signal; and

means for displaying said formed image;

wherein the sample is a biological sample.

27. A method of imaging a sample, comprising the steps of:

generating an ultrasonic signal;

directing the ultrasonic signal into the biological
sample, wherein the sample linearly reflects the signal;

receiving the signal linearly reflected by said sample,
which received signal is distorted and contains a first order
and higher order component signals at first and higher
frequencies respectively;

forming an image from one of said higher order component
signals of the received distorted signal; and

displaying said formed image.

28. A system for imaging a sample, comprising:

means for generating an ultrasonic signal;

means for directing the ultrasonic signal into a sample,
wherein the sample linearly reflects the signal;

means for receiving the signal linearly reflected by said
sample, which received signal is distorted and contains a first
order and higher order component signals at first and higher
frequencies respectively;

means for forming an image from one of said higher order
component signals of the received linearly reflected, distorted
signal; and

means for displaying said formed image.

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